in accordance with §154.824 of this subpart must be fitted with one of the following:

- (1) A detonation arrester;
- (2) A flame arrester: or
- (3) An explosion suppression system acceptable to the Commandant (CG-522).
- (b) The inlet to a vapor destruction unit must:
  - (1) Have a liquid seal; and
- (2) Have two quick-closing stop valves installed in the vapor line.
  - (c) A vapor destruction unit must:
- (1) Not be within 30 meters (98.8 ft.) of any tank vessel berth or mooring at the facility;
- (2) Have a flame arrester or detonation arrester fitted in the vapor line; and
- (3) Alarm and shut down when a flame is detected on the flame arrester or detonation arrester.
- (d) When a vapor destruction unit shuts down or has a flame-out condition the vapor destruction unit control system must:
- (1) Close the quick-closing stop valves required by paragraph (b)(2) of this section; and
- (2) Close the remotely operated cargo vapor shutoff valve required by §154.810(a) of this subpart.

[CGD 88–102, 55 FR 25429, June 21, 1990, as amended by CGD 96–026, 61 FR 33666, June 28, 1996; USCG–2010–0351, 75 FR 36284, June 25, 2010]

## §154.840 Personnel training.

- (a) A person in charge of a transfer operation utilizing a vapor control system must have completed a training program covering the particular system installed at the facility. Training must include drills or demonstrations using the installed vapor control system covering normal operations and emergency procedures.
- (b) The training program required by paragraph (a) of this section must cover the following subjects:
- (1) Purpose of a vapor control system:
- (2) Principles of the vapor control system;
- (3) Components of the vapor control system;
- (4) Hazards associated with the vapor control system;

- (5) Coast Guard regulations in this subpart:
- (6) Operating procedures, including:
- (i) Testing and inspection requirements,
  - (ii) Pre-transfer procedures,
  - (iii) Connection sequence,
  - (iv) Start-up procedures, and
  - (v) Normal operations; and
  - (7) Emergency procedures.

## § 154.850 Operational requirements.

- (a) A facility must receive vapors only from a vessel which has its certificate of inspection or certificate of compliance endorsed in accordance with 46 CFR 39.10–13(e).
- (b) The following must be performed not more than 24 hours prior to each transfer operation:
- (1) All alarms and automatic shutdown systems required by this part must be tested; and
- (2) The analyzers required by §154.820(a), §154.824 (d) and (e) of this subpart must be checked for calibration by use of a span gas.
- (c) The position of all valves in the vapor line between the vessel's tanks and the facility vapor collection system must be verified prior to the start of the transfer operation.
- (d) A tank barge overfill control system that meets the requirements of 46 CFR 39.20-9(b) must not be connected to an overfill sensor circuit that exceeds the system's rated cable length, inductance, and capacitance.
- (e) When vapor is being received from a vessel with inerted cargo tanks, the remotely operated cargo vapor shutoff valve required by \$154.810(a) of this subpart must not be opened until the pressure at the facility vapor connection exceeds the pressure on the downstream side of the remotely operated cargo vapor shutoff valve.
- (f) The initial cargo transfer rate must not exceed the rate agreed upon at the pre-transfer conference required by §156.120(w) of this chapter and 46 CFR 39.30-1(h).
- (g) The cargo transfer rate must not exceed the maximum allowable transfer rate as determined by the lesser of the following:
- (1) A transfer rate corresponding to the maximum vapor processing rate for the vapor control system, as specified